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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/779,076	02/07/2001	James M. Rochelle	26053.00	7830

22465 7590 07/28/2003

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EXAMINER
WIMER, MICHAEL C

ART UNIT	PAPER NUMBER
2821	

DATE MAILED: 07/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/779,076	ROCHELLE ET AL.	
	Examiner	Art Unit	
	Michael C. Wimer	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4-4-2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23 and 28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23 and 28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☒ The proposed drawing correction filed on *04 April 2003* is: a)☒ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-23 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart et al (6392547).

Regarding Claims 1-3,15 and 28, Stewart et al show a proximity monitoring system capable of accurate boundary detection independent of orientation comprising, a transmitter 21 including an antenna array 32,33 that continuously generates a magnetic field based on the transmitted electrical signal and having an intensity within the area 23 and defining a boundary 24, a receiver module 25 including an antenna array 53-55 responsive to the magnetic field, in any direction, and connected to a single channel receiver 56 and a measurement circuit for determining a total power of the magnetic field incident at the antenna array, all arranged as claimed. Although Stewart et al do not specifically call the processor 61 a "measurement circuit", column 5, lines 30-53 suggest to the skilled artisan that the processor performs a number of different functions. It would have been obvious to the skilled artisan that the processor must determine the total power or signal strength at the antennas 53-55. The three antennas are oriented in three distinct and different axes, and thus the total power is connected to a common node connected to the detector 56 connected to the demodulator 60 and

connected to the processor 61. Stewart et al discuss the intensity threshold indicative that the receiver tag 25 is proximate the base station 21 within the perimeter 24. One skilled in the art recognizes as obvious that there is a measurement circuit implied in the circuitry since there is a preset threshold power level employed in the system. A skilled artisan would find it obvious that the threshold power level is achieved by measurement of the total power incident at the antenna array. The acknowledgement detection function (col. 5, lines 51-54) cannot be performed without the total power incident on the antenna array being measured. Regarding Claims 4-6,12-14, it would have been obvious to the skilled artisan to employ three transmitting antennas and/or two receiver antennas, and notice of such use is hereby taken. As to Claims 7 and 28, the line frequency multiple defining the carrier frequency is an obvious method used in transmitters. As to Claims 8,15-23, the oscillator and PLL and amplifiers, etc., are all obvious transmitter components in the Stewart et al system, and would therefore be obvious to employ therein, by the skilled artisan. As to Claims 9-11, the particular modulation technique is also obvious to the skilled artisan.

Response to Arguments

3. Applicant's arguments filed 4/4/03 have been fully considered but they are not persuasive. Specifically, there is motivation in the Stewart et al. reference for a measurement circuit because a skilled artisan recognizes as obvious the function of the circuitry in the Fig. 4 of Stewart et al provides for measuring the total power of the incident magnetic field by virtue of the magnetic field circuit 56. There is a threshold defined for this circuit. Thus, a measurement of the incident field is a requirement for

this circuit to operate. Additionally, the single channel receiver is certainly provided by Stewart et al as there are no frequency changes. These systems operate on a single frequency. Since all claimed structure is shown to be obvious in Stewart et al for providing the claimed functions, the claims at hand are not seen to patentably define thereover.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Wimer whose telephone number is (703) 305-3555. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K. Wong can be reached on (703) 308-4856. The fax phone numbers

for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Michael C. Wimer
Primary Examiner
Art Unit 2821

MCW
17 July 2003